EXHIBIT 300   **UII 021-514765477**

Exhibit 300: Capital Asset Summary
Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2009-06-30
Date of Last Change to Activities: 2012-08-23
Investment Auto Submission Date: 2012-02-27
Date of Last Investment Detail Update: 2012-02-27
Date of Last Exhibit 300A Update: 2012-08-23
Date of Last Revision: 2012-08-23

Agency: 021 - Department of Transportation   **Bureau:** 12 - Federal Aviation Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: FAAXX504: En Route Automation Modernization (ERAM)

2. Unique Investment Identifier (UII): 021-514765477

Section B: Investment Detail

1. **Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

   The ERAM system replaces the 40-year-old HOST system currently used at the 20 Air Route Traffic Control Centers (ARTCC). ERAM, technology wise, is the most complex system of the Next Generation Air Transportation System (NextGen) and National Airspace System (NAS). ERAM will assist the current en route paradigm to migrate from a ground-based system of air traffic control to a satellite-based system of air traffic management. ERAM is committed to increasing capacity and improving efficiency within the NAS. For pilots, ERAM increases flexible routing around congestion, weather, and other restrictions. For controllers, ERAM provides a user-friendly interface with customizable displays. Trajectory modeling is more accurate, allowing maximum airspace use, better conflict detection, and improved decision making. ERAM substantially increases the number of flights that can be tracked. Controllers will benefit from reduced workloads along with NAS wide data sharing between ARTCCs. ERAM is composed of the Enhanced Backup Surveillance (EBUS) system (replaced the Direct Access Radar Channel backup system); technical refresh of the Radar Position Display Processor; and En Route Information Display (ERIDS) system (electronic tool that distributes information to controllers to improve their productivity and efficiency) and ERAM Release 1, 2 and 3. EBUS and ERIDS fully operational at all sites. The ERAM system (hardware and initial software) has been installed at all 20 ARTCCs. ERAM Release 2 (R2) will be used as the system baseline for sites to achieve Initial Operational Capability (IOC). Two ARTCCs have

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declared IOC. Salt Lake City ARTCC has been successfully operating ERAM R2 in a continuous Operational Suitability Demonstration phase since 10/19/2010 and Seattle ARTCC since 12/28/2010. In-Service Decision was achieved on 3/29/2011 that committed the FAA in moving forward with declaring IOC at the remaining 18 sites. The replan: achieve IOC at 7 sites during FY2012 [6 achieved with R2, 1 planned with Release 3 (R3)], 11 sites during FY2013 (with R3). First ERAM site ORD is planned for March 2012. The ERAM system directly and indirectly supports the implementation of major Air Traffic Control (ATC) Systems such as SWIM, DATACOMM, and ADS-B, which depend on a successful ERAM deployment. This program has dependencies with AIM, TPS, STARS, IFPA, VSCS, WARP, ATCBI-6, FTI, ERAM D Position & Enhancements, ATOP, TMA, TAMR, SWIM, ADS-B, TFM, CATMT, DATACOMM, TAMR-3 and NNEW.

2. **How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

 ERAM contributes to the DOT Strategic Plan's Safety goal to reduce transportation related injuries and fatalities and the Economic Competitiveness goal of achieving maximum economic returns on transportation policies and investment outcomes. In the Next Generation Air Transportation System (NextGen) timeframe, demand for air transportation and other airspace services is expected to grow significantly from today's levels in terms of passenger volume, amount of cargo shipped, and overall number of flights. With respect to air traffic, changes will occur not only in the number of flights but also in the characteristics of those flights. Thus, NextGen must be flexible enough to manage variations in passengers numbers, types of aircraft, and overall number of flights leading up to a safer airspace use and promoting a more economic air transportation system. The ERAM system will aid in meeting the NextGen demand for an improved and safe National Airspace System (NAS). ERAM is committed to increasing capacity and improving efficiency within and providing for a safe NAS. ERAM provides a fully redundant system with no loss of service when either the primary computer fails or is not available during planned system maintenance. The current HOST system has only limited backup functionality. This improved availability will preclude the need to impose restrictions on airspace users when the primary channel is not available. ERAM also increased the number of flight plans that can be stored; provides flexibility in airspace configuration; and extends radar coverage in all ARTCCs by increasing the number of radar feeds. For pilots, ERAM increases flexible routing around congestion, weather, and other restrictions which supports improved safety for the NAS. For controllers, ERAM provides a user-friendly interface with customizable displays. Trajectory modeling is more accurate, allowing maximum airspace use, better conflict detection, and improved decision making supporting improved safety within the NAS. ERAM substantially increases the number of flights that can be tracked. Controllers will benefit from reduced workloads along with NAS wide data sharing between ARTCCs. The ERAM system is currently installed at all 20 ARTCCs and is continuing to implement the waterfall implementation. Failure to fully fund the investment will impact the ability of reaching 24/7 operation at all 20 ARTCCs thereby delaying the capability in meeting user needs in preparation for NextGen.

3. **Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

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In-service decision was achieved on March 29, 2011 which allows the ERAM program to move forward in declaring IOCs at the remaining eighteen sites. The ERAM program was rebaselined on June 15, 2011 with respect to cost and schedule. The rebaseline added an additional $330 Million of facilities and equipment funds to the program in order to complete the waterfall implementation.

4. **Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

Accomplishments for the current year (2012) include: Achieved Independent Operational Assessment (IOA) which allows sites to proceed forward to declare Initial Operational Capability (IOC). Six sites achieved IOC) which will allow these sites to continue forward to achieving continuous operations in preparation for achieving Operational Readiness Date (ORD). One site to achieve IOC which will allow this site to continue forward to achieving continuous operations in preparation for achieving ORD. Seven sites will achieve continuous operations which will allow these sites to proceed to an ORD which will allow for providing 24/7 operations in controlling air traffic. Key Site ORD will be achieved which will allow for providing 24/7 operations in controlling air traffic. An additional four sites will achieve ORD which will allow for providing 24/7 operations in controlling air traffic. Accomplishments for the budget year (2013) include: First Site ORD on Release 3 will be achieved. Release 3 includes all of the functionality previously deployed in Release 2 plus additional capabilities to interface and fuse surveillance data from ADS-B sensors. Eleven sites will achieve IOC which will allow these sites to continue forward to continuous operations in preparation for achieving ORD. Nine sites will achieve continuous operations which will allow these sites to continue forward to an ORD which will allow for providing 24/7 operations in controlling air traffic. Nine additional sites will achieve ORD (with Release 3) which will allow for providing 24/7 operations in controlling air traffic.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2011-06-30

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Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding				
	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	$1.4	$0.0	$0.0	$0.0
DME (Excluding Planning) Costs:	$2,009.0	$181.1	$155.0	$143.3
DME (Including Planning) Govt. FTEs:	$47.9	$14.5	$14.5	$17.4
Sub-Total DME (Including Govt. FTE):	$2,058.3	$195.6	$169.5	$160.7
O & M Costs:	$56.5	$44.0	$62.7	$60.9
O & M Govt. FTEs:	$18.6	$33.1	$39.1	$41.6
Sub-Total O & M Costs (Including Govt. FTE):	$75.1	$77.1	$101.8	$102.5
Total Cost (Including Govt. FTE):	$2,133.4	$272.7	$271.3	$263.2
Total Govt. FTE costs:	$66.5	$47.6	$53.6	$59.0
# of FTE rep by costs:	462	235	260	270

Total change from prior year final President's Budget ($)		$3.1	$37.3	
Total change from prior year final President's Budget (%)		1.13%	15.92%	

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2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

FY11 funding increase due to increase in FTE costs. FY12 funding increased by FY12 Appropriation adjustment to reflect transfer of funds from outyear requirements as well as increase in FTE costs.

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy												
Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value ($M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	6920	DTFAWA-03-C-00015									
Awarded	6920	DTFWA-03-C-00071									
Awarded	6920	DTFWA-09-C-00012									
Awarded	6920	DTFWA-09-C-00036									

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

The FAA does not require EVM for contracts less than $10 million or for contracts funded by O&M. The OIS contract is less than 10M, and the SOS Contract is for O&M activities. The Prime Contract requires EVM. Contract monitoring for the prime contract is via EVM. For TAC2 and OIS the value of the work is determined each year and a task statement is used to direct contractor efforts. Support work is closely aligned with the work required of the prime contractor and is compliant with 748A, section 3.7.3, which defines the use of LOE as EV methodology. The EV for the work is spread evenly over the calendar year. The work is constantly monitored through records of documents reviewed, papers written, support provided for specific efforts, and through monthly program and cost reviews. Using this method, the program office can redirect efforts to most efficiently support the needs of the program.

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Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-08-23

Section B: Project Execution Data

Table II.B.1 Projects					
Project ID	**Project Name**	**Project Description**	**Project Start Date**	**Project Completion Date**	**Project Lifecycle Cost ($M)**
1	En Route Automation Modernization (ERAM)	The ERAM system replaces the 40-year old En Route HOST computer and backup system currently used at the twenty FAA Air Route Traffic Control Centers (ARTCC) in the continental United States.			

Activity Summary								
Roll-up of Information Provided in Lowest Level Child Activities								
Project ID	**Name**	**Total Cost of Project Activities ($M)**	**End Point Schedule Variance (in days)**	**End Point Schedule Variance (%)**	**Cost Variance ($M)**	**Cost Variance (%)**	**Total Planned Cost ($M)**	**Count of Activities**
1	En Route Automation Modernization (ERAM)							

Key Deliverables								
Project Name	**Activity Name**	**Description**	**Planned Completion Date**	**Projected Completion Date**	**Actual Completion Date**	**Duration (in days)**	**Schedule Variance (in days)**	**Schedule Variance (%)**
1	Key Site Operational Readiness	Includes activities that allow for Release 2	2012-03-31	2012-03-31	2012-03-23	30	8	26.67%

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	Key Deliverables							
Project Name	**Activity Name**	**Description**	**Planned Completion Date**	**Projected Completion Date**	**Actual Completion Date**	**Duration (in days)**	**Schedule Variance (in days)**	**Schedule Variance (%)**
	Demonstration (ORD) on Release 2 - APB MILESTONE	Operational Readiness Demonstration to be declared at the Key Site (ZLC and ZSE). Release 2 includes all of the functionality to replace the HOST system.						

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Section C: Operational Data

Table II.C.1 Performance Metrics								
Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Reduce the number of maintenance actions required by EBUS as compared to the HOST backup system – DARC.	Number	Technology - Efficiency	Under target	767.000000	40.000000	26.000000	40.000000	Semi-Annual
Time required for air traffic controllers to access aeronautical information (e.g. Notice to Airmen (NOTAMS), Pilot reports, aeronautical charts, etc.).	Time	Customer Results - Timeliness and Responsiveness	Under target	5.000000	3.000000	3.000000	3.000000	Semi-Annual
ERAM availability as compared to HOST legacy system.	Percentage	Technology - Reliability and Availability	Over target	0.999000	0.000000	0.000000	0.999900	Monthly
Number of Radars with which ERAM can interface as compared to the HOST legacy system.	Number	Technology - Efficiency	Over target	24.000000	0.000000	0.000000	64.000000	Quarterly
Number of aircraft ERAM can track.	Number	Mission and Business Results - Services for Citizens	Over target	1100.000000	0.000000	0.000000	1900.000000	Semi-Annual